

## INFORMATION REPORT INFORMATION REPORT

## CENTRAL INTELLIGENCE AGENCY

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C-O-N-F-I-D-E-N-T-I-A-L

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COUNTRY China

REPORT

SUBJECT

Machine Tools  
Manufactured in Communist China

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## STANDARD EQUIPMENT

- ① Complete electric equipment including motor and control
- ② Coolant pump
- ③ Square tool post
- ④ 4-jaw independent chuck
- ⑤ Steady rest
- ⑥ Follow rest
- ⑦ Driver plate
- ⑧ Set of change wheels
- ⑨ Set of wrenches

### CHINA NATIONAL MACHINERY IMPORT CORP. (IMPORT-EXPORT)

Er-I-Kou, Hsi-Chiao, Peking, China · Cable Address: "MACHIMPORT" Peking

#### BRANCHES

TIENTSIN OFFICE: 14 Chang Teh Road  
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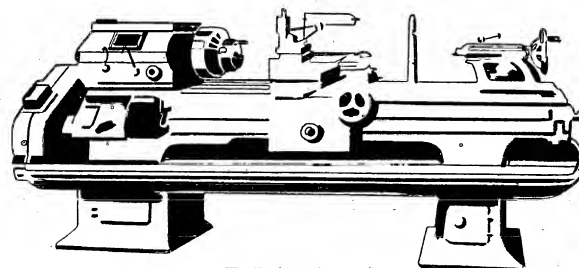
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58-183-20

# MING CHING

## *Lathes*

6' — 8' — 10'



明精車床

### EXPORTERS

**CHINA NATIONAL MACHINERY IMPORT CORPORATION**

# MING CHING LATHES MODEL L AND F

Designed for accurate, high class general service, these powerful and efficient lathes follow approved modern practice in construction.

**THE BED** is heavily ribbed to resist torsional strains. It is provided with a wide, deep gap for accommodating works of large diameter. Vee ways on the bed take up cutting stresses and accurately locate the saddle. The cast iron used has a steel content and this reduces wear.

**THE GEARS IN THE HEADSTOCK** are made of steel and tempered, ensuring a very powerful spindle drive. The gears for changing spindle speeds are mounted on spline shafts. On stopping, a brake quickly comes into action to bring the spindle quickly to rest. The headstock cover is hinged and oil tight when closed and the gears run in oil bath.

**THE MAIN SPINDLE** is hollow and amply proportioned. It is carried in long adjustable bearing bushes of best special bronze.

**THE QUICK CHANGE GEAR BOX** is so equipped that a wide range of

metric and whitworth threads can be cut. The necessary change wheels are included in the standard equipment.

**THE APRON** is enclosed and comprises the gearing for longitudinal and cross feed, and for rapid traverse of the saddle by handwheel.

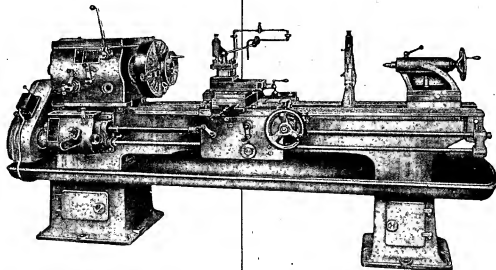
**THE STOUT SADDLE** can withstand the heaviest stresses and its long guides prevent any tipping up.

**THE TOP REST** is provided with a square tool post. The base plate rotates and is provided with graduation. The feed screws on cross and top rest are enclosed and have scale rings.

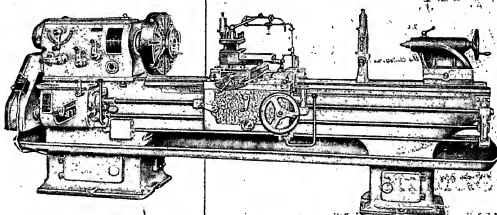
**THE TAILSTOCK** has long bearing on bed and can be set over for taper turning.

The lathe is provided with a reversing motor contactor for reversing spindle rotation. The contactor is provided with thermal overload relay and has under-voltage feature. It is controlled by a push button station.

6' 8"  
LATHES  
MODEL L



10'  
LATHE  
MODEL F



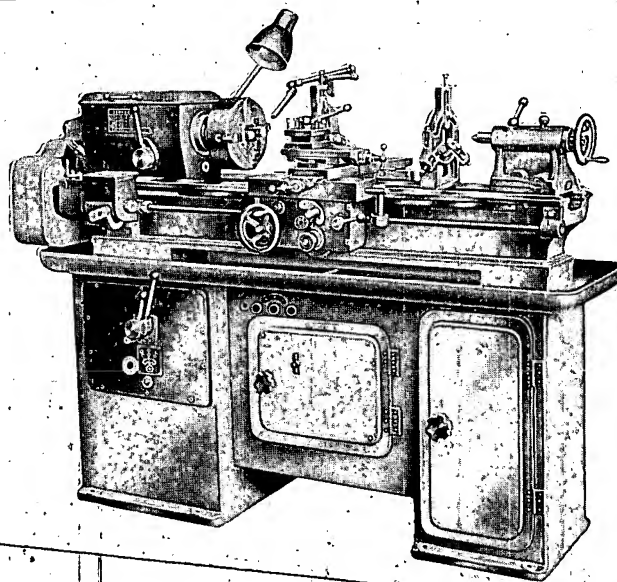
|                                      | Model L         | Model F          |
|--------------------------------------|-----------------|------------------|
| Height of centres                    | 8-3/4"          | 10 1/2"          |
| Swing over bed                       | 15"             | 19"              |
| Swing over carriage                  | 10"             | 12 1/2"          |
| Width of gap                         | 6"              | 11-13/16"        |
| Swing over gap                       | 24"             | 30"              |
| Metric threads:                      |                 |                  |
| Number of changes                    | 29              | 29               |
| Range, pitch in mm                   | 0.25-6          | 0.25-6           |
| Whitworth threads:                   |                 |                  |
| Number of changes                    | 32              | 32               |
| Range, threads per inch              | 28-2            | 28-2             |
| Number of feed changes               | 32              | 32               |
| Number of spindle speeds             | 8               | 12               |
| Range of spindle speeds              | 30-600 rpm      | 12.5-512 rpm     |
| Diameter of spindle bore             | 1-9/16"         | 2-1/8"           |
| Taper of hole in spindle             | 1:19.002        | 1:20             |
| Taper of centres                     | Morse No. 3     | Morse No. 4      |
| Range of feeds:                      |                 |                  |
| Longitudinal, per rev.               | 0.008"-0.12"    | 0.008"-0.12"     |
| Cross, per rev.                      | 0.005"-0.085"   | 0.005"-0.085"    |
| Pitch of leadscrew, threads per in.  | 4               | 4                |
| Maximum travel of carriage:          |                 |                  |
| Longitudinal                         | 31"             | 60 1/2"          |
| Cross                                | 11"             | 12 1/2"          |
| Maximum travel of top slide          | 6"              | 7 1/2"           |
| Maximum swivel of top slide          | ± 450           | ± 450            |
| Height of tool bottom to centre line | 1"              | 13/16"           |
| Maximum travel of tailstock spindle  | 6"              | 8"               |
| Maximum setover of tailstock         | ± 3/4"          | ± 3/4"           |
| Power of driving motor               | 3 HP            | 6 HP             |
| Speed of driving motor               | 1500 rpm        | 1000 rpm         |
| Distance between centres             |                 | 72"              |
| Length of bed                        | 36"             | 60"              |
| Net weight, approx.                  | 3000 lbs.       | 3300 lbs.        |
| Gross weight, approx.                | 3400 "          | 3860 "           |
| Overall Dimensions (L x W x H)       | 91" x 46" x 57" | 120" x 46" x 60" |
| Shipping Dimensions (L x W x H)      | 95" x 40" x 69" | 120" x 40" x 69" |
|                                      |                 | 150" x 45" x 63" |

130X800

普通車床

# ENGINE LATHE

130X800mm



中國機械進口公司

**CHINA NATIONAL MACHINERY IMPORT CORPORATION**

(IMPORT-EXPORT)

ER-LI-KOU, HSI-CHIAO, PEKING, CHINA

CABLE ADDRESS: "MACHIMPORT" PEKING

This is a high speed light duty lathe of the latest design which meets the most exacting demands made on single piece job production in respect of accuracy, economy and ease of production. Taper turning and thread cutting can also be performed on the machine.

Spindle runs at comparatively high speed and is driven by flat belt from speed gear box installed in base to avoid shock and permit the use of carbide tipped tools. Back gear is provided in headstock for low speed operation so that necessary torque is obtained for rough turnings.

In case of sudden overload during operation, the belt will slip; protective means like safety clutch and safety pin is, therefore, dispensed with and operation simplified.

Gear wheels for speed gear box are cut by gear shapers with high precision, minimizing noise during high speed operation. Back gears in headstock are hardened, capable of standing high torque. The spindle is mounted at its front end with adjustable bronze bearing and taper roller bearing at rear, for taking up radial and thrust loads.

Apron is provided with non-interfering lever so that it is impossible to close the split nut when power feed is engaged. By means of the tumbler gear in headstock the direction of feeds can be reversed.

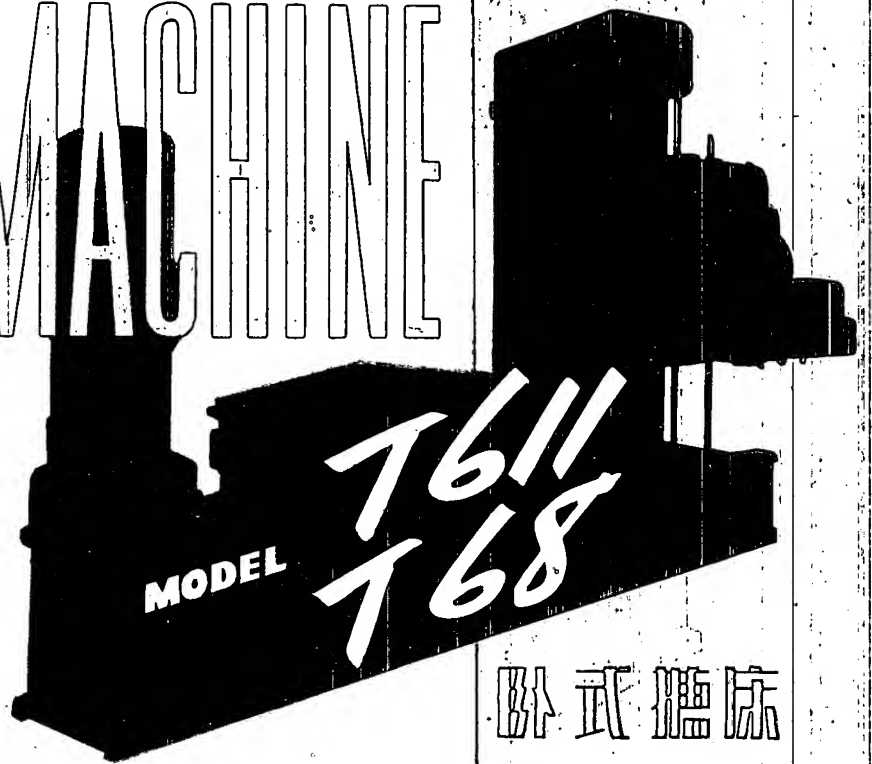
This lathe is more convenient than geared head lathes.

### SPECIFICATION

|                              |  |
|------------------------------|--|
| Height of centres            | 135 mm   |
| Distance between centres     | 810 mm   |
| Max. turning diameter:       |  |
| Bar material                 | 31 mm  |
| Swing over carriage          | 170 mm   |
| Swing over bed               | 270 mm   |
| Max. turning length:         | 710 mm   |
| Thread cutting:              |  |
| Metric:                      |  |
| No.                          | 23   |
| Pitch                        | 0.3, 0.35, 0.4, 0.45, 0.5, 0.55, 0.6, 0.7, 0.75, 0.8, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6 mm   |
| Whitworth:                   |  |
| No.                          | 21   |
| Threads per inch             | 32, 28, 24, 20, 18, 16, 14, 13, 12, 11½, 11, 10, 9, 8, 7, 6, 5, 4½, 4, 3, 2.   |
| Motor                        | 1.7 KW, 1500 rpm   |
| Machine dimension (L×W×H)    | 1694×600×1280 mm   |
| Shipping measurement (L×W×H) | 1860×716×1320 mm   |
| Nett weight                  | 745 kg   |
| Gross weight                 | 905 kg   |
| Normal accessories:          | <div> Taper turning attachment<br/> 4-jaw independent chuck<br/> Steady rest </div> <div> Follower rest<br/> Set of spanners<br/> Length limit stop </div> |

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# HORIZONTAL BORING, DRILLING AND MILLING MACHINE



中國機械進口公司

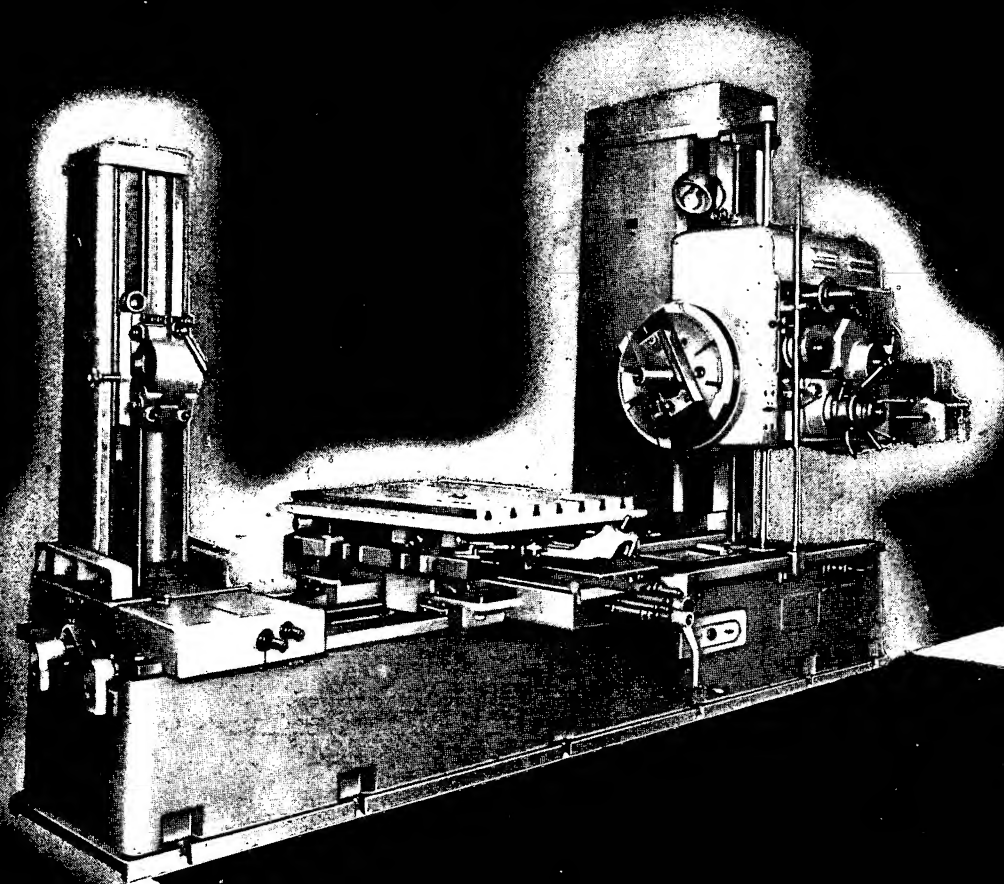
**CHINA NATIONAL MACHINERY IMPORT CORP.,**

Importers & Exporters

ER-LI-KOU, HSI-CHIAO PEKING, CHINA. CABLE ADDRESS: "MACHIMPORT" PEKING.

臥式鏜床

# T68





## **HORIZONTAL BORING, DRILLING AND MILLING MACHINE**

### **MODEL T-68**

This machine can be advantageously applied for boring, drilling, counter-boring and reaming holes where close tolerance on centre distance between holes is of prime importance, as well as for tapping and facing operations. It is especially adapted in boring and end facing operations for large cumbersome castings.

Axial feeds of spindle, radial feeds of face plate slide, vertical feeds of headstock, and cross and longitudinal feeds of table are controlled through a feed box. Rapid traverse of all movable parts is accomplished by a separate motor. Cutting operations and rapid traverse motions are provided with over-load safety devices. The rotary table can be freely rotated to any angle.

### **MAIN SPECIFICATIONS**

|  |              |
|--|--------------|
| Diameter of spindle .....                    | 85 mm.       |
| Taper hole in spindle .....                  | Morse No. 5  |
| Max. axial travel of spindle .....           | 600 mm.      |
| Diameter of face plate .....                 | 630 mm.      |
| Max. radial travel of face plate slide ..... | 170 mm.      |
| Working surface of table (L×W) .....         | 1000×800 mm. |
| Max. travel of table (Power or manual) :     |              |
| Longitudinal .....                           | 1140 mm.     |
| Cross .....                                  | 850 mm.      |
| Distance, spindle axis to table:             |              |
| Minimum .....                                | 42.5 mm.     |
| Maximum .....                                | 800 mm.      |
| Number of spindle speeds .....               | 18           |

Range of spindle speed ..... 20-1000 rpm.

Number of face plate speeds ..... 14

Range of face plate speed ..... 10-200 rpm.

Number of longitudinal and cross feeds of table, axial feeds of spindle, vertical feeds  
of headstock and radial feeds of face plate slide ..... 18

Range of spindle feeds per revolution of spindle ..... 0.05-16 mm.

Range of table and headstock feeds per revolution of spindle ..... 0.025- 8 mm.

Range of table and headstock feeds per revolution of face plate ..... 0.05-16 mm.

Range of face plate slide feeds per revolution of face plate ..... 0.025- 8 mm.

Speed of rapid axial movement of spindle ..... 4.8 m/min.

Speed of rapid longitudinal and cross movements of table and vertical movement of  
headstock ..... 2.4 m/min.

Speed of rapid movement of face plate slide ..... 1.2 m/min.

Two-speed electric motor for main drive:

Power ..... 6.5 KW.

Speed ..... 1500/3000 rpm.

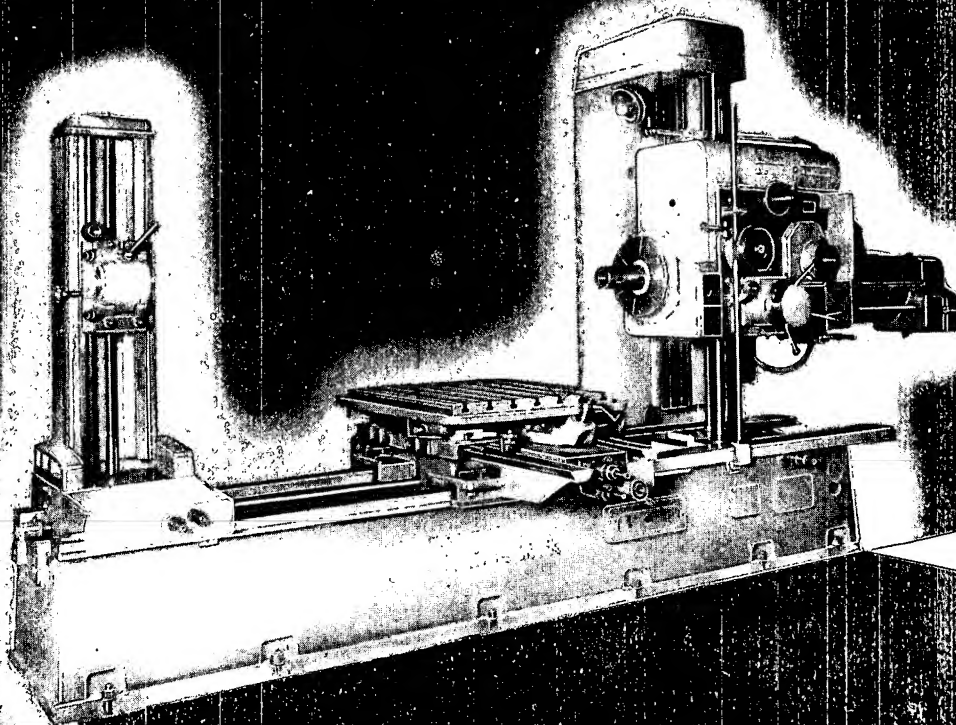
Electric motor for rapid traverse:

Power ..... 2.8 KW.

Speed ..... 1500 rpm.

Overall dimensions (L×W×H) ..... 5070×2250×2755 mm.

Net weight ..... 12000 kgs. approx.



**T6W**

## **HORIZONTAL BORING, DRILLING AND MILLING MACHINE**

### **MODEL T611**

This machine is equipped with an extra-rigid main spindle principally suitable for processing jobs on work-pieces of ferrous metal, especially for cast iron parts where radial feeds are not required. This machine is suitable for boring, drilling, counterboring and reaming hole with close tolerance on center distance between holes as well as for tapping, and milling by using milling cutters with shank or end milling cutters.

Spindle drive is effected by two-speed electric motor through a speed gear box.

Axial feed of spindle and feeds of table are effected through a feed box. The rapid traverse of all movable parts is accomplished by a separate motor. Cutting and rapid traverse motions are linked to each other and may stop automatically when overloaded.

Changes of cutting speeds and feed are regulated by a manual operated mechanism. The working table is mounted on balls and can be freely rotated to any angle by hand and fixed by a stop when the table revolves to 90°. This machine is equipped with graduation scale and safety stop, and the co-ordinate position of headstock and working table can be accurately set by use of micrometer and gauge block.

## MAIN SPECIFICATIONS

Diameter of spindle ..... 110 mm.

Taper in spindle ..... Morse No. 6

Max. axial travel of spindle ..... 600 mm.

Working surface of table (L x W) ..... 1000x800 mm.

Max. travel of table (power or manual) :

    Longitudinal ..... 1225 mm.

    Cross ..... 850 mm.

Distance, spindle center line to table ..... 45-800 mm.

Number of spindle speeds ..... 18

Range of spindle speeds ..... 20-1000 rpm.

Number of longitudinal and cross feeds of table, axial feeds of spindle, vertical feeds  
    of headstock, each ..... 18

Range of spindle feed per revolution of spindle ..... 0.05-16 mm.

Range of working table and headstock feeds per revolution of spindle ..... 0.025- 8 mm.

Speed of rapid axial movement of spindle ..... 4.8m/min.

Speed of rapid longitudinal and cross movement of table and vertical movement of  
    headstock ..... 2.4m/min.

3-phase, A.C. motor:

    Main drive (two-speed) :

        Power ..... 6.5 KW.

        Speed ..... 1500-3000 rpm.

    Electric motor for rapid traverse:

        Power ..... 2.8 KW.

        Speed ..... 1500 rpm.

Overall dimensions (L x W x H) ..... 5070x2250x2755 mm.

Net weight of the machine ..... (approx.) 11600 kgs.

**BRANCHES:**

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Cable Address: MACHIMPORT Tientsin

SHANGHAI OFFICE: 27, Chung Shan Road E 1

Cable Address: MACHIMPORT Shanghai

CANTON OFFICE: 2, West Bund Road

Cable Address: MACHINERY Canton

25X1

# EAR HOBBING MACHINE

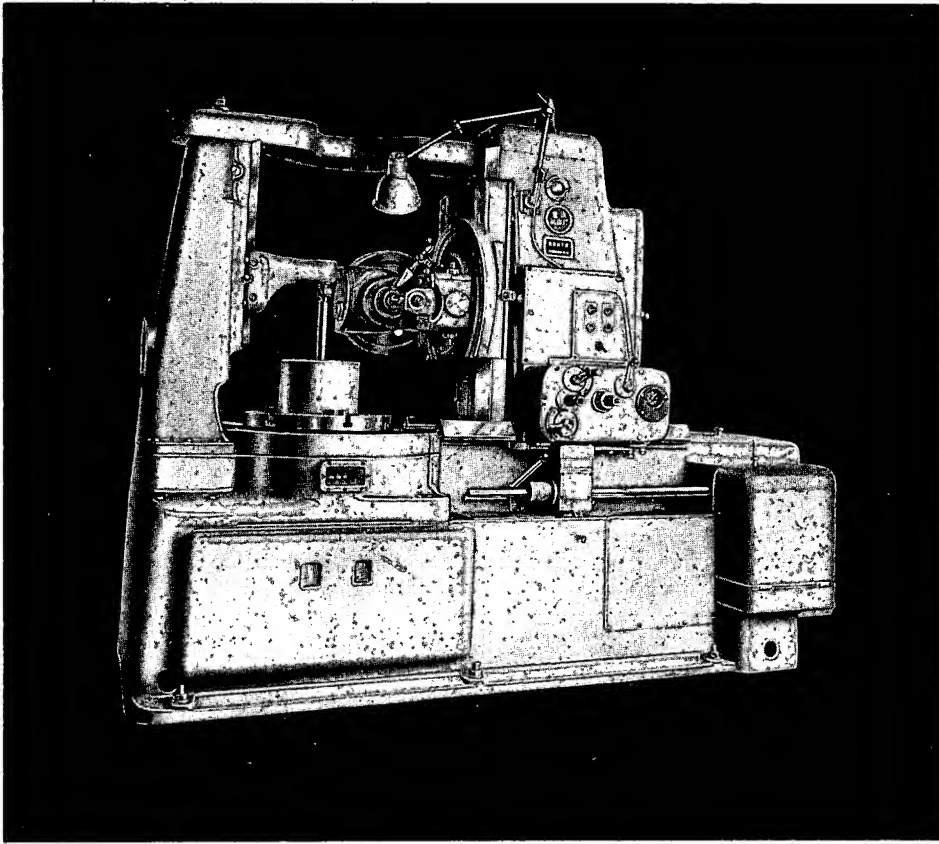
滾齒機

中國機械進口公司

CHINA NATIONAL MACHINERY IMPORT CORPORATION

( IMPORT - EXPORT )

ER-LI-KOU, HSI-CHIAO PEKING, CHINA CABLE ADDRESS: MACHIMPORT PEKING



The illustrated GEAR HOBGING MACHINE MODEL J38 is designed for hobbing spur, helical and worm gears with high speed steel hobs in lot or mass production. This machine is rigidly constructed with precision workmanship, thus ensures high output and high grade products.

The machine is provided with hydraulic device for balancing the weight of tool slide and shock of cutting resistance. This eliminates the backlash between elevating feed screw and nut, rendering conventional or climb hobbing possible.

Radial or tangential feed can be used for cutting worm wheels, while the latter can be accomplished by a special tangential hob slide which can be supplied on special order.

The machine is provided with 3 independent motors for driving hob spindle, rapid traverse and coolant pump.



## SPECIFICATION

|  |     |                   |
|--|-----|-------------------|
| Max. module to be cut:   |     |                   |
| At normal speed  | ... | 6                 |
| At slow speed  | ... | 8                 |
| Max. outside diameter of spur gear to be cut (without workstay)              | ... | 800 mm            |
| Max. outside diameter of helical gear to be cut:                             |     |                   |
| For helix angle 30°  | ... | 500 mm            |
| For helix angle 60°  | ... | 190 mm            |
| Max. height to be cut (spur gear)  | ... | 275 mm            |
| Distance between cutter spindle and gear blank centre line:                  |     |                   |
| Minimum  | ... | 30 mm             |
| Maximum  | ... | 500 mm            |
| Vertical traverse of cutter  | ... | 310 mm            |
| Minimum distance between surface of work table to cutter spindle centre line | ... | 200 mm            |
| Max. diameter of hob   | ... | 120 mm            |
| Diameter of hob spindle (changeable)   | ... | 22, 27, 32 mm     |
| Diameter of table bore   | ... | 80 mm             |
| Diameter of indexing worm wheel  | ... | 624 mm            |
| Diameter of spindle of gear blank  | ... | 35 mm             |
| Number of cutter spindle speeds  | ... | 7                 |
| Range of cutter speed  | ... | 475-192 rpm       |
| Feed per revolution of gear blank:   |     |                   |
| Vertical   | ... | 0.025-3 mm        |
| Radial   | ... | 0.06 -0.72 mm     |
| Tangential   | ... | 0.25 -1 mm        |
| Main drive motor:  |     |                   |
| Power  | ... | 2.8 KW            |
| Speed  | ... | 1420 rpm          |
| Rapid traverse motor:  |     |                   |
| Power  | ... | 1 KW              |
| Speed  | ... | 1410 rpm          |
| Weight (with accessories) approx.  | ... | 3800 kg           |
| Overall dimension (L×W×H)  | ... | 2406×1210×2030 mm |

## STANDARD ACCESSORIES (furnished with the machine):

1. 8 speed change gears.
2. 43 change gears for indexing feed and differential drives.
3. 3 hob arbors of diameters 22, 27 and 32 mm with spacing rings.
4. 1 work arbor, diameter 35 mm with washers.
5. 1 work rest.
6. 2 couplings for differential connection.
7. Set of wrenches and crank.

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## **CHINA NATIONAL MACHINERY IMPORT CORP.**

**(IMPORT — EXPORT)**

Er-li-Kou, Hsi-Chiao, Peking, China  
Cable Address: "MACHIMPORT" Peking

### **B R A N C H E S**

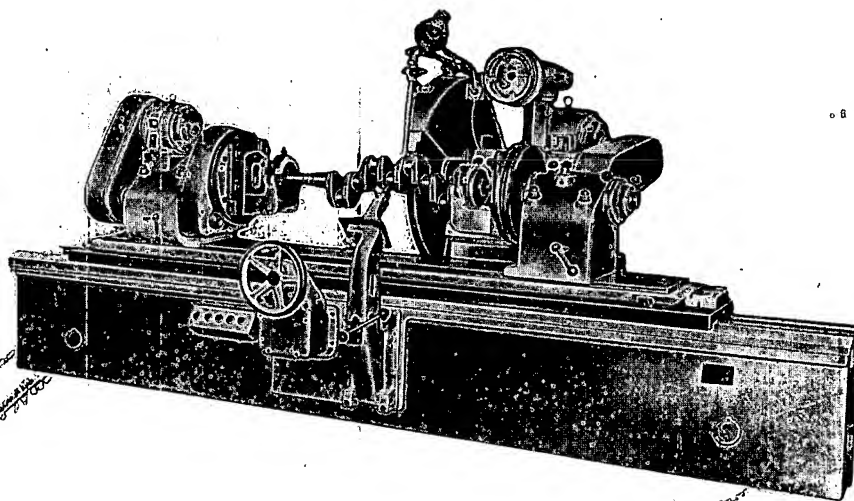
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25X1

曲軸磨床

# CRANKSHAFT GRINDING MACHINE

Model M8230



中國機械進口公司

CHINA NATIONAL MACHINERY IMPORT CORPORATION  
(IMPORT-EXPORT)  
ER-LI-KOU, HSI-CHIAO PEKING CHINA • CABLE ADDRESS: MACHIMPORT PEKING

# 曲 軸 磨 床

## CRANKSHAFT GRINDING MACHINE MODEL M8230

This machine is valuable for repairing crank pins in the automobile and tractor repair shops. General cylindrical grinding can also be performed on this machine.

Workpiece is held in two chucks, one at headstock and the other at tailstock. The chucks and the balancing weight may be adjusted according to the crank radius.

Change of work speed is effected through the cone pulley.

The longitudinal traverse of the table and the cross feed of the wheel head are actuated by hand.

The machine is equipped with three motors.

Grinding wheel truing device, V gauges for rapid setting up of work, and driving plate for the workpiece to be ground between centres are also included.

### SPECIFICATION

|  |  |
|--|--|
| Centre height over bed ... ..                          | 300 mm (11 $\frac{3}{8}$ " )                     |
| Distance between centres ... ..                        | 1600 mm (63" )                                   |
| Distance from wheel axis to centre-line of centres:    |  |
| Minimum ... ..   | 275 mm (10 $\frac{5}{8}$ " )                     |
| Maximum ... ..   | 595 mm (23 $\frac{3}{4}$ " )                     |
| Diameter of crank pin to be ground (with steady rest): |  |
| Minimum ... ..   | 30 mm (1 $\frac{1}{8}$ " )                       |
| Maximum ... ..   | 100 mm (3 $\frac{5}{8}$ " )                      |
| Maximum radius throw ... ..                            | 110 mm (4 $\frac{3}{4}$ " )                      |
| Maximum length of crankshaft to be ground ...          | 1600 mm (63" )                                   |
| Maximum weight of workpiece ... ..                     | 100 kg (220 lbs.)                                |
| Maximum longitudinal travel of table (by hand) ...     | 1600 mm (63" )                                   |
| Maximum swivel of table ... ..                         | 5°   |
| Maximum cross travel of wheelhead (by hand)... ..      | 320 mm (12 $\frac{3}{8}$ " )                     |
| Dimension of grinding wheel $\phi$ :-                  |  |
| Minimum $\phi$ ... ..                                  | 550 mm (21 $\frac{3}{8}$ " )                     |
| Maximum $\phi$ ... ..                                  | 900 mm (35 $\frac{3}{8}$ " )                     |
| Width... ..  | 33-40 mm (1 $\frac{3}{8}$ " -1 $\frac{3}{4}$ " ) |
| Bore ... ..  | 305 mm (12" )                                    |
| Work speeds ... ..                                     | 33; 64; 115 rpm                                  |

Motors:- 3-phase, A.C.

for Wheelhead:

Power ... .. 7 KW  
Speed ... .. 960 rpm

for Headstock:

Power ... .. 1 KW  
Speed ... .. 960 rpm

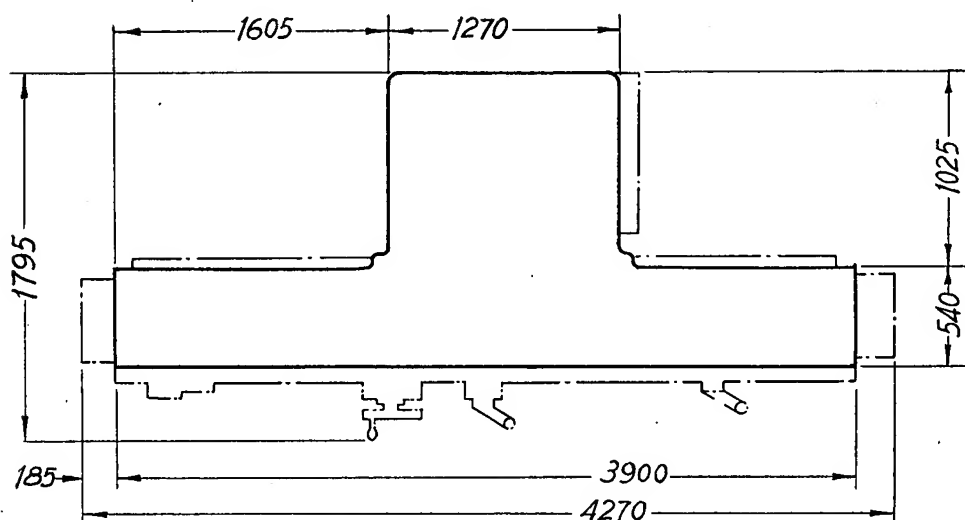
for Coolant Pump:

Power ... .. 0.125 KW  
Speed ... .. 2800 rpm

Overall dimension (L×W×H) ... .. 3930×1795×1620 mm

(154 $\frac{3}{32}$ "×70 $\frac{3}{4}$ "×63 $\frac{3}{32}$ ")

Net weight... .. 6000 kg approx. (13,228 lbs.)



Note: The weights, dimensions, capacities, and performance ratings in brackets are approximate equivalents in the English system for indicative purpose only.

For improvement of the machine, we reserve the right to alter either the design or the specification.

**B R A N C H E S**

|                  |  |
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